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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10 054,852	01/25/2002	Masakuni Ezumi	648.41111X00	2068

20457 7590 04/30/2003

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ARLINGTON, VA 22209

EXAMINER

EDMONDSON, LYNNE RENEE

ART UNIT	PAPER NUMBER
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1725

DATE MAILED: 04/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/054,852

Applicant(s)

EZUMI ET AL.

Examiner

Lynne Edmondson

Art Unit

1725

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 24 February 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
See the attached detailed Office action for a list of the certified copies to be received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) to a provisional application:  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other \_\_\_\_\_

## DETAILED ACTION

### *Double Patenting*

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 1-5 and 8-10 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 3 and 10-13 of copending Application No. 10/066674. Although the conflicting claims are not identical, they are not patentably distinct from each other because both teach friction stir welding. Instant claims 1, 3 and 9 teach a friction stir welding method wherein hollow members with face plates having interlocking (grooves and projections) sections are engaged and placed in abutment and joined by insertion of a rotary tool. This method is taught in '293 claims 3, 10, 12 and 13. Instant claims 2, 4, 8 and 10 teach abutment of the recessed areas and projections with friction welding in the abutted area. This method is taught in '293 claim 11. Instant claim 5 teaches the groove and projection within the range of diameter of the small diameter portion of the rotary tool. This is taught in '293 claim 10 particularly lines 11-16.

It would have been obvious to one of ordinary skill in the art at the time of the invention that the structures are the same although the terminology is slightly different and that the friction welding method would be the same for interlocked members regardless of other shapes and structures present in or on the member.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Matsunaga et al.(US 2001/0015370 A1).

Matsunaga teaches a friction stir welding for welding hollow members with orthogonal face plates (figure 7 and paragraphs 19-21), wherein the plates and members are connected to connecting members comprising grooves and projections which are interlocked when the members are placed in abutment (paragraphs 22-23).

The abutted members are welded by disposal of a rotary tool into the abutment (paragraphs 21-26). See also Matsunaga claims 1-20.

4. Claims 1-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Kawasaki et al. (USPN 6321975 B1).

Kawasaki teaches a friction stir welding for welding hollow members with orthogonal face plates (figure 1), wherein the plates and members are connected to connecting members comprising grooves and projections which are interlocked when the members are placed in abutment (col 2 line 33 – col 3 line 10). The abutted members are welded by disposal of a rotary tool into the abutment wherein the groove and projection are disposed within the range of diameter of the small diameter of the rotary tool (col 3 lines 11-35 and col 3 lines 45-54) and the depth of the rotary tool (col 4 lines 5-41). See also Kawasaki claims 6-13.

5. Claims 9-12 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakamura et al. (USPN 6413610 B1).

Nakamura teaches a friction stir welding for welding hollow members with diagonal face plates (figure 1), wherein the plates and members are connected to connecting members comprising grooves and projections which are interlocked when the members are placed in abutment (col 4 lines 56-67). The abutted members are welded by disposal of a rotary tool into the abutment wherein the groove and projection are disposed within the range of diameter and depth of the small diameter of the rotary

tool (col 5 line 38 – col 6 line 16, col 6 lines 30-51 and figures 5-8). See also Nakamura claims 11-21.

### ***Conclusion***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ezumi et al. (US 2002/0030081, claimed method, solid members), Ezumi et al. (US 2002/0023941 A1), Rosen et al. (USPN 6045027, claimed method, solid members), Ezumi et al. (USPN 6193137 B1, claimed method and structure), Okamura et al. (US 2003/0005852 A1) and Kato et al. (USPN 6244496 B1).

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynne Edmondson whose telephone number is (703) 306-5699. The examiner can normally be reached on M-F from 7-4 with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Dunn can be reached on (703) 308-3318. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-7718 for regular communications and (703) 305-7115 for After Final communications.

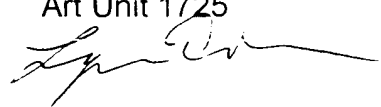
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

Lynne Edmondson

Examiner

Art Unit 1725

A handwritten signature in cursive script, appearing to read 'Lynne Edmondson', followed by a date '4/28/03'.

LRE

April 28, 2003